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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/734,996	BRASSIL, JOHN T.	
	Examiner	Art Unit	
	FARZANA E. HOSSAIN	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30 and 32-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/05/2008 has been entered.

Response to Amendment

2. This office action is in response to communications filed 05/05/2008. Claims 1, 13, 14, 16, 21 and 29 are amended. Claims 2, 7-10, 15, 17, 19-28, 30, 32-37 have been previously presented. Claims 3-6, 11, 12 and 18 are original. Claim 31 is cancelled.

Response to Arguments

3. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Regarding Claim 1, The applicant argues that Flavin does not disclose a detector for identifying an event in the media content, generating an event detection signal, a module for receiving the event detection signal and generating a structural point detection signal in response to determining, based on configuration information that the event detection signal indicates that the event is a structural point having significance to the media content, and a cue generator for receiving the structural point detection signal and the configuration information and based thereon for generating a private cue having a predefined structure.

In response to the this argument, Flavin discloses a cue generator or segment announcer for receiving a structural point detection signal or timestamps and cue points and configuration information and based thereon for generating a cue having a predefined structure (Figure 1, 109, 110, Figure 2, 109, 110, Column 2, lines 58-65, Column 3, lines 17-35, 40-44, Column 4, lines 23-52, Column 5, lines 1-25, 63-67, Figure 3, Column 6, lines 1-7). Safadi discloses a detector for identifying an event in the media content and generating an event detection signal or cue tone (Figure 3, 315, Column 8, lines 1-14); a module to receive the event detection signal and cue generator for generating cues (Figure 3, 320, Column 8, lines 1-35). In analogous art, Reynolds a module for receiving an event detection signal or metadata (Figure 2, 132, Page 3, paragraph 0031) and generating a structural point detection signal in response to determining, based on configuration information, that the event detection signal indicates that the event is a structural point having significance to the media content or the announcement and trigger from the metadata of the video data (Figure 3, 320,

Column 8, lines 20) and a cue generator (Figure 2, 134) for receiving the structural point detection signal and the configuration information or variables and based thereon for generating a private cue having a predefined structure based on geographical location, priority and ID (Pages 3-4, paragraphs 0033-0038, 0040). See rejection.

Furthermore, in *KSR Intl. Co. v. Teleflex Inc.*, 127 S.Ct 1727, No. 04-1350, slip. op. at 12 (2007), the Court found that if all the claimed elements are known in the prior art then one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yield predictable results to one of ordinary skill in the art at the time of the invention.

4. Regarding dependent claims 13, 16 and 29 and respective dependent claims, the applicant argues that they have been amended to incorporate similar features of claim 1 and prior art does not cure the deficiencies of Flavin and Reynolds for the independent claims.

In response to the argument, please response to claim 1.

5. Regarding dependent claims 12, 19-22, and the applicant argues the prior art of record do not cure the deficiencies of Flavin and Reynolds for the independent claims.

In response to the argument, please response to claim 1.

6. Applicant's failure to adequately traverse the Examiner's taking of Official Notice for Claim 25 in the last Office Action is taken as an admission of the facts noticed.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-11, 13-18, 23, 24, 26-30 and 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flavin (US 6,005,603) in view of Safadi (US 6,487,721) and Reynolds et al (US 2001/0037500 and hereafter referred to as "Reynolds").

Regarding Claims 1 and 13, Flavin discloses a streaming media server (109 or 110 as shown in Figs. 1 and 2) for providing media content in a plurality of media streams and discloses a method for delivering information associated with a media program in a media stream to a stream processing application (SPA) (Column 2, lines 58-65; Column 3, lines 17-35, Column 4, lines 23-52), comprising:

A cue generator or segment announcer for receiving a structural point detection signal or timestamps and cue points and configuration information and based thereon for generating a cue having a predefined structure (Figure 1, 109, 110, Figure 2, 109, 110, Column 2, lines 58-65, Column 3, lines 17-35, 40-44, Column 4, lines 23-52,

Column 5, lines 1-25, 63-67, Figure 3, Column 6, lines 1-7), wherein the cue is configured to be used by a stream processing application (SPA) to receive information concerning an event associated with the media content (Column 3, lines 17-35, Column 4, lines 23-52, Column 5, lines 11-38), a cue handling mechanism for entering and transmitting descriptive information and announcements (Column 4, lines 3-17, 53-64, Figure 1, 115, 250), a network interface for transmitting cue and media content in one of the plurality of media streams to the SPA (Column 4, lines 3-16, 37-67, Column 5, lines 1-46). Flavin is silent on the detector, module, the cue is a private cue, and wherein the private cue cannot be interpreted by a third party other than the specific affiliates, a cue handling mechanism for embedding the private cue into one of the plurality of media streams with the media content to provide precise time synchronization for the processing of the one of the plurality of media streams by the SPA; and a network interface for transmitting the embedded cue and the media in the one of the plurality of media stream to the SPA to the special affiliates.

In analogous art, Safadi discloses a detector for identifying an event in the media content and generating an event detection signal or cue tone (Figure 3, 315, Column 8, lines 1-14); a module to receive the event detection signal and cue generator for generating cues (Figure 3, 320, Column 8, lines 1-35). In analogous art, Reynolds a module for receiving an event detection signal or metadata (Figure 2, 132, Page 3, paragraph 0031) and generating a structural point detection signal in response to determining, based on configuration information, that the event detection signal indicates that the event is a structural point having significance to the media content or

the announcement and trigger from the metadata of the video data (Figure 3, 320, Column 8, lines 20) and a cue generator (Figure 2, 134) for receiving the structural point detection signal and the configuration information or variables and based thereon for generating a private cue having a predefined structure based on geographical location, priority and ID (Pages 3-4, paragraphs 0033-0038, 0040), wherein the private cue is not be interpreted by a third party other than specific affiliates (Pages 3-4, paragraphs 0033-0038, 0040); a cue handling mechanism or a meta data substation system embedding the private cue or embedded meta data (i.e., announcements, packages, and triggers) in one of the plurality of media streams with the media content to provide precise time synchronization for the processing of the one of the plurality of media streams by the SPA (Page 2, paragraphs 0013-0015, 0025, Page 3, paragraphs 0028-0030, Figures 1-4), a network interface for transmitting the embedded private cue and the media content in the one of the plurality of media streams to the SPA of the specific affiliates (Pages 3-4, paragraphs 0032-0038, 0040, 0043).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Flavin to include the teachings of Safadi in order allow a headend to insert commercials of local interest and to avoid devices which can detect and block out commercials (Column 1, lies 25-30, 63-67) as disclosed by Safadi. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to include the teachings of Reynolds in order to provide information to end users that are tailored to the market of the specific affiliates (Page 2, paragraph 0015) as disclosed by Reynolds.

Furthermore, the *KSR* Court found that if all the claimed elements are known in the prior art then one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yield predictable results to one of ordinary skill in the art at the time of the invention. No. 04-1350, slip. op. at 12.

Regarding Claim 16, Flavin discloses a streaming media server (109 or 110 as shown in Figs. 1 and 2) for providing media content in a plurality of media streams and discloses a method for delivering information associated with a media program in a media stream to a stream processing application (SPA) (Column 2, lines 58-65; Column 3, lines 17-35, Column 4, lines 23-52) and a content distribution network (Figure 1, Figure 2), comprising:

a media server for broadcasting a media program in at least one media stream to a stream processing application (SPA) (Figure 1, Figure 2, 109, 110, 112, Column 2, lines 58-65, Column 3, lines 36-40, Column 4, lines 23- 52, Column 5, line 11-67, Column 6, lines 1-7), the media program having at least one structural point or an announcement may contain additional description such as "Start of Commercial" or "End of Commercial" and other information (see Column 5, line 11 - Column 6, line 7); a server side cue handling mechanism for entering and transmitting descriptive information with program timing, structure and identity information related to the media program in the at least one media stream in the form of cue (Column 4, lines 3-17, 53-64, Figure 1, 115, 250, Column 5, line 11-67, Column 6, lines 1-7), the server-side cue handling mechanism comprising a cue generator or segment announcer for receiving a

structural point detection signal or timestamps and cue points and configuration information and based thereon for generating a cue having a predefined structure (Figure 1, 109, 110, Figure 2, 109, 110, Column 2, lines 58-65, Column 3, lines 17-35, 40-44, Column 4, lines 23-52, Column 5, lines 1-25, 63-67, Figure 3, Column 6, lines 1-7), wherein the cue is configured to be used by a stream processing application (SPA) to receive information concerning an event associated with the media content (Column 3, lines 17-35, Column 4, lines 23-52, Column 5, lines 11-38). Flavin is silent on the detector, module, the cue is a private cue, and wherein the private cue cannot be interpreted by a third party other than the specific affiliates, a cue handling mechanism for embedding the private cue into one of the plurality of media streams with the media content to provide precise time synchronization for the processing of the one of the plurality of media streams by the SPA; and a network interface for transmitting the embedded cue and the media in the one of the plurality of media stream to the SPA to the special affiliates.

In analogous art, Safadi discloses a server side cue handling mechanism for comprising a detector for identifying an event in the media content and generating an event detection signal or cue tone (Figure 3, 315, Column 8, lines 1-14); a module to receive the event detection signal and cue generator for generating cues (Figure 3, 320, Column 8, lines 1-35). In analogous art, Reynolds a module for receiving an event detection signal or metadata (Figure 2, 132, Page 3, paragraph 0031) and generating a structural point detection signal in response to determining, based on configuration information, that the event detection signal indicates that the event is a structural point

having significance to the media content or the announcement and trigger from the metadata of the video data (Figure 3, 320, Column 8, lines 20) and a cue generator (Figure 2, 134) for receiving the structural point detection signal and the configuration information or variables and based thereon for generating a private cue having a predefined structure based on geographical location, priority and ID (Pages 3-4, paragraphs 0033-0038, 0040), wherein the private cue is not be interpreted by a third party other than specific affiliates (Pages 3-4, paragraphs 0033-0038, 0040); a cue handling mechanism or a meta data substation system embedding the private cue or embedded meta data (i.e., announcements, packages, and triggers) in one of the plurality of media streams with the media content to provide precise time synchronization for the processing of the one of the plurality of media streams by the SPA (Page 2, paragraphs 0013-0015, 0025, Page 3, paragraphs 0028-0030, Figures 1-4), a network interface for transmitting the embedded private cue and the media content in the one of the plurality of media streams to the SPA of the specific affiliates (Pages 3-4, paragraphs 0032-0038, 0040, 0043).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Flavin to include the teachings of Safadi in order allow a headend to insert commercials of local interest and to avoid devices which can detect and block out commercials (Column 1, lies 25-30, 63-67) as disclosed by Safadi. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to include the teachings of Reynolds in

order to provide information to end users that are tailored to the market of the specific affiliates (Page 2, paragraph 0015) as disclosed by Reynolds.

Furthermore, the *KSR* Court found that if all the claimed elements are known in the prior art then one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yield predictable results to one of ordinary skill in the art at the time of the invention. No. 04-1350, slip. op. at 12.

Regarding Claim 29, Flavin discloses a method (Figure 1, Figure 2), comprising: generating a media stream containing a media program at a stream generator which is inherent to a media server that produces various content streams (Figure 1, Figure 2, 109, 110, 112, Column 2, lines 58-65, Column 3, lines 36-40, Column 4, lines 23- 52, Column 5, line 11-67, Column 6, lines 1-7), identifying an event in the media program of the media stream (Figures 1 and 2, 109, 110, Column 2, lines 58-65; Column 3, lines 17-35, Column 4, lines 23-52, Column 5, lines 11-67, Column 6, lines 1-7), determining if the event is a structural point based on the configuration information (Column 2, lines 58-65, Column 3, lines 36-40, Column 4, lines 23-52, Column 5, lines 11-67, Column 6, lines 1-7), using a cue generator or segment announcer for receiving a structural point detection signal or timestamps and cue points and configuration information and based thereon for generating a cue having a predefined structure (Figure 1, 109, 110, Figure 2, 109, 110, Column 2, lines 58-65, Column 3, lines 17-35, 40-44, Column 4, lines 23-52, Column 5, lines 1-25, 63-67, Figure 3, Column 6, lines 1-7), wherein the cue is

configured to be used by a stream processing application (SPA) to receive information concerning an event associated with the media content (Column 3, lines 17-35, Column 4, lines 23-52, Column 5, lines 11-38), for generating, at cue handling mechanism, a cue packet to represent the structural point in response to determining that the event is a structural point (Figures 1 and 2, 110, 115, Column 3, lines 17-35, Column 4, lines 23-52, Column 5, lines 11-38). Flavin discloses that announcements, including cue points, may be transmitted in the content stream (Figure 1, 112, 115, Column 5, lines 17-53). See rejections of Claims 1, 13 and 16. Flavin is silent on the detector, module, the cue is a private cue, and wherein the private cue cannot be interpreted by a third party other than the specific affiliates, a cue handling mechanism for embedding the private cue into one of the plurality of media streams with the media content to provide precise time synchronization for the processing of the one of the plurality of media streams by the SPA; and a network interface for transmitting the embedded cue and the media in the one of the plurality of media stream to the SPA to the special affiliates.

In analogous art, Safadi discloses a server side cue handling mechanism for comprising a detector for identifying an event in the media content and generating an event detection signal or cue tone (Figure 3, 315, Column 8, lines 1-14); a module to receive the event detection signal and cue generator for generating cues (Figure 3, 320, Column 8, lines 1-35) and communicating the media stream and cue command to the intermediary network node (Figure 1, Figure 2); the node modifying based on the cue command, the media stream to generate a modified media stream and the node communicating the modified media (Figure 4, Column 9, lines 8-35). In analogous art,

Reynolds discloses a module for receiving an event detection signal or metadata (Figure 2, 132, Page 3, paragraph 0031) and generating a structural point detection signal in response to determining, based on configuration information, that the event detection signal indicates that the event is a structural point having significance to the media content or the announcement and trigger from the metadata of the video data (Figure 3, 320, Column 8, lines 20) and a cue generator (Figure 2, 134) for receiving the structural point detection signal and the configuration information or variables and based thereon for generating a private cue having a predefined structure based on geographical location, priority and ID (Pages 3-4, paragraphs 0033-0038, 0040), wherein the private cue is not be interpreted by a third party other than specific affiliates (Pages 3-4, paragraphs 0033-0038, 0040); a cue handling mechanism or a meta data substation system embedding the private cue or embedded meta data (i.e., announcements, packages, and triggers) in a data or media stream with the media content to provide precise time synchronization (Page 2, paragraphs 0013-0015, 0025, Page 3, paragraphs 0028-0030, Figures 1-4), communicating the media stream and the private cue packet from the media server to at least one intermediary network node (Page 2, paragraph 0015, Pages 3-4, paragraphs 0032-0038, 0040, 0043); the at least one intermediary network node modifying, based at least in part on the private cue packet, the media stream to generate a modified media stream (Pages 3-4, paragraphs 0032-0038, 0040, 0043); the at least one intermediary network node communicating the modified media stream to at least one of the specific client receivers or those at specific regions or local area (Pages 3-4, paragraphs 0032-0038, 0040, 0043). Reynolds

teaches that the meta data substitution system (Figures 1-3, 100) can be situated at any point downstream of the original point of video distribution, such as a regional television network, a local television network affiliate, a local cable head end, or an internet service provider (Page 2-3, paragraphs 0025, 0028-0030).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Flavin to include the teachings of Safadi in order allow a headend to insert commercials of local interest and to avoid devices which can detect and block out commercials (Column 1, lies 25-30, 63-67) as disclosed by Safadi. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to include the teachings of Reynolds in order to provide information to end users that are tailored to the market of the specific affiliates (Page 2, paragraph 0015) as disclosed by Reynolds.

Furthermore, the *KSR* Court found that if all the claimed elements are known in the prior art then one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yield predictable results to one of ordinary skill in the art at the time of the invention. No. 04-1350, slip. op. at 12.

Regarding Claim 2, Flavin, Safadi and Reynolds disclose all the limitations of Claim 1. Flavin discloses that the cue includes one of program timing, structure, identity, start time, and end time of a program (Column 3, lines 37-40, Column 4, line

65-67, Column 5, lines 1-30, 63-67, Column 6, lines 1-7) Reynolds discloses a private cue (Pages 3-4, paragraphs 0032-0038, 0040, 0043).

Regarding Claim 3, Flavin, Safadi and Reynolds disclose all the limitations of Claim 1. Flavin discloses that the stream processing application (SPA) is a program recording application (Column 4, line 65-67, Column 5, lines 1-10) of Flavin.

Regarding Claim 4, Flavin, Safadi and Reynolds disclose all the limitations of Claim 1. Flavin discloses the stream processing application (SPA) is a program insertion application or inserting text on a TV or computer screen (Column 6, lines 30-36).

Regarding Claim 5, Flavin, Safadi and Reynolds disclose all the limitations of Claim 1. Flavin discloses SPA is a program modification application or eliminating commercials, turning the sound on or off, turning the picture on or off, displaying text on a TV or computer screen, sounding an alarm. (Column 4, line 65-67, Column 5, lines 1-10, Column 6, lines 30-36).

Regarding Claim 6, Flavin, Safadi and Reynolds disclose all the limitations of Claim 1. Flavin discloses SPA is a program adaptation application or adapting to a program or broadcast associated with a geographic region or location (Column 5, lines 11-16).

Regarding Claim 7, Flavin, Safadi and Reynolds disclose all the limitations of Claim 4. Flavin discloses a program switching application (Column 5, lines 11-16, Column 6, lines 30-36).

Regarding Claim 8, Flavin, Safadi and Reynolds disclose all the limitations of Claim 1. Flavin discloses time information is transmitted with each announcement (Figures 1 and 2,115, Figure 3, 321, Column 5, lines 17-31, 48-67, Column 6, lines 1-4). Reynolds discloses a private cue includes time sensitive program information (Page 2, paragraph 0013, Page 3, paragraph 0032).

Regarding Claim 9, Flavin, Safadi and Reynolds disclose all the limitations of Claim 1. Flavin discloses cue includes a cue type of event notification cue, an event pending cue, an event termination cue and an event continuing cue, and a user defined custom cue or announcement and segment content information (Figure 3, 350, Column 5, lines 17-67, Column 6, lines 1-4). Reynolds discloses a private cue (Page 3-4, paragraphs 0032-0040).

Regarding Claim 10, Flavin, Safadi and Reynolds disclose all the limitations of Claim 1. Reynolds discloses a private cue (Page 3-4, paragraphs 0032-0040). Flavin discloses the predefined structure of the cue includes at least one of the following fields: an event type field for specifying an event type as met by an announcement (Figures 1 and 2, 115), a cue type field for specifying a cue type is met by the announcement type field (Figure 4, 405, Column 6, lines 19-20); a segment identifier section 320, and/or the segment content information 350 (Column 5, lines line 17 - Column 6, line 4); a number field for specifying a number that in combination with the event type specified by the event type filed uniquely describes an event or the message tag (Figure 3, 311, Column 5, lines 39-44); a duration field for specifying the time remaining before completion of a specified event is met by the interval information (Column 5, lines 32-

37); a time field for specifying time information (Figure 3, 321, Column 5, lines 48-53); and a variable-length label field for storing text suitable for display (Figure 3, 353, Column 5, line 67, Column 6, lines 1-7).

Regarding Claim 11, Flavin, Safadi and Reynolds disclose all the limitations of Claim 10. Flavin discloses the event type field is one of an advertisement event type, a video-frame event type, an interstice event type, an audio-track event type, an audio-segment event type, an video-segment event type cue, program-title event type, program-description event type, program-label event type, content-type event type, program-advisory, and user-defined event type or the announcement (Figures 1 and 2, 115), segment identifier section (Figure 3, 320), and other various event types as listed such as weather report or commercial (Figure 3, Figure 4, Column 5, lines line 17 - Column 6, line 4).

Regarding Claim 14, Flavin, Safadi and Reynolds disclose all the limitations of Claim 13. Reynolds discloses generating a private cue packet to represent the structural point (Pages 3-4, paragraphs 0032-0040) includes generating the cue packet (Page 2, paragraphs 0013, 0014, Page 3, paragraph 0032, Page 4, paragraph 0040). Flavin discloses generating the cue packet automatically (Column 4, lines 38-52).

Regarding Claim 15, Flavin, Safadi and Reynolds disclose all the limitations of Claim 13. Reynolds discloses receiving a packet; determining whether the packet is a private cue packet; when the packet is a private cue packet, then determining if the private cue packet triggers an action based on predetermined configuration parameters; when the private cue packet triggers an action, using information from the private cue

packet to perform a function; otherwise, discarding the private cue packet (Pages 3-4, paragraphs 0032-0040). Flavin discloses receiving a cue packet and determining if actions need to be performed based on predetermined configuration parameters (Column 6, lines 30-67, Column 4, lines 3-22 and Column 4, line 65 - Column 5, line 10).

Regarding Claim 17, Flavin, Safadi and Reynolds disclose all the limitations of Claim 16. Reynolds discloses private cue packets (Pages 3-4, paragraphs 0032-0040). Reynolds discloses a client-side cue handling mechanism for receiving packets, determining that a particular packet is a cue packet, and decoding program tuning, structure, and identity information from the cue packet (Column 4, lines 3-22, Column 4, line 65 -Column 6, line 7 and lines 30-67).

Regarding Claim 18, Flavin, Safadi and Reynolds disclose all the limitations of Claim 17. Flavin discloses that the claimed application coupled to the client-side cue handling mechanism for using the program timing, structure, and identity information of the media stream to perform an application function (Figures 1 and 2, 150, 170, Column 4, lines 3-22, Column 4, line 65-67, Column 5, lines 1-67, Column 6, lines 1-7, 30-67).

Regarding Claim 23, Flavin, Safadi and Reynolds disclose all the limitations of Claim 1.Flavin discloses a stream generator for generating the media streams is met as media streams are generated by a stream generator that is inherent to a media server that produces various content streams (Figure 2, 112, Column 4, lines 38-43).

Regarding Claim 24, Flavin and Reynolds disclose all the limitations of Claim 1. Flavin discloses cue generator is further operable to insert the generated private cue

into a corresponding media stream to which the generated private cue relates or one or more devices that can be used to automatically provide descriptions and announcements for a content stream (Figure 2, 250, Figures 1 and 2, 112 Column 4, lines 43-53 and Column 5, lines 11-62), where events such as commercial boundaries or segment types may be identified, and an announcement 115 or cue is generated/inserted into the content stream (Figures 1 and 2, 112, Column 3, lines 36-39).

Regarding Claim 26, Flavin, Safadi and Reynolds disclose all the limitations of Claim 17.Flavin discloses the server-side stream generator for generating the at least one media stream is met as media streams are generated by a stream generator that is inherent to a media server that produces various content streams (Figure 2, 112, Column 4, lines 38-43), wherein the cue handling mechanism inserts the cue packet in the at least one media stream (Column 5, lines 17-53, Figures 1 and 2, Column 3, lines 17-35 and Column 4, lines 23-52). Reynolds discloses private cue packets in streams (Pages 3-4, paragraphs 0032-0040).

Regarding Claim 27, Flavin, Safadi and Reynolds disclose all the limitations of Claim 26. Flavin discloses the server-side network interface (network interface connector or communication connector (Figure 2, 205) for communicating the at least one media stream having the cue packet inserted therein across a communication network to at least one client (Figures 1 and 2, 112, 115, 120 150, 151,152, 160, 161 and 163, Column 3, lines 54-67, Column 4, lines 1-2, Column 5, lines 32-62). Reynolds discloses the private cue packet (Pages 3-4, paragraphs 0032-0040).

Regarding Claim 28, Flavin, Safadi and Reynolds disclose all the limitations of Claim 27. Flavin discloses network interface broadcasts the at least one media stream having the cue packet inserted therein to a plurality of clients or announcements, including cue points, may be transmitted in the content stream and broadcast to a plurality of clients as described above in claims 1 and 27 (Figures 1 and 2, 115, 120, Column 5, lines 17-53). Reynolds discloses the private cue packet (Pages 3-4, paragraphs 0032-0040). See claims 1 and 27.

Regarding Claim 30, Flavin, Safadi and Reynolds disclose all the limitations of Claim 29. Reynolds disclose the at least one client receiver processing the modified media stream to generate output to an end user as met by viewer 70 as shown in Fig. 1 (Figure 1, 70 Page 2, paragraphs 0025, Pages 3-4, paragraphs 0032-0040).

Regarding Claim 32, Flavin and Reynolds disclose all the limitations of Claim 29. Reynolds discloses the modifying comprises adding at least one cue packet to the media stream (Figure 2, 140, 134, 136, Page 2, paragraph 0025, Pages 3-4, paragraphs 0029, 0032-0043).

Regarding Claim 33, Flavin, Safadi and Reynolds disclose all the limitations of Claim 29. Reynolds discloses modifying comprises removing the private cue packet to the media stream (Figure 2, 110, 140, 132, 134, 136, Page 2, paragraph 0025, Pages 3-4, paragraphs 0029, 0032-0043).

Regarding Claim 34, Flavin and Reynolds disclose all the limitations of Claim 29. Reynolds discloses that the modifying comprises inserting a second media stream into

the media stream where the inserter 136 generates and inserts the final video data stream as shown in Fig. 2 (Figure 2, 136, Page 4, paragraph 0041).

Regarding Claim 35, Flavin, Safadi and Reynolds disclose all the limitations of Claim 34. Reynolds discloses the second media stream comprises at least one advertisement as (Page 3, paragraph 0027).

Regarding Claim 36, Flavin, Safadi and Reynolds disclose all the limitations of Claim 29. Reynolds discloses media stream and the private cue packet are communicated from the media server to a plurality of different intermediary network nodes wherein each of the different intermediary network nodes comprises respective target client receivers to whom it communicates modified media stream generated thereby (Page 3, paragraph 0028, Figure 1, 50, 100, 58, 60, 100, Figure 2, 100).

Regarding Claim 37, Flavin, Safadi and Reynolds disclose all the limitations of Claim 36. Reynolds discloses generating, by a first of the intermediary network nodes, a first modified media stream (Figure 2, 100, Figure 3, 110', Pages 3-4, paragraphs 0028, 0032-0040); and generating, by a second of the intermediary network nodes, a different modified media stream (Figure 2, 100, Figure 3, 110", Pages 3-4, paragraphs 0028, 0032-0040).

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flavin in view of Safadi and Reynolds as applied to claim 10, in further view of the SMPTE STANDARD (SMPTE 309M-1999) for Television - Transmission of Date and Time Zone Information in Binary Groups of Time and Control Code (hereafter referred to as

"SmpteDate") and the SMPTE STANDARD (SMPTE 12M-1999) for Television, Audio and Film - Time and Control Code (hereafter referred to as "SmpteTime").

Regarding Claim 12, Flavin, Safadi and Reynolds disclose all the limitations of Claim 10. Flavin discloses a time field (Figure 3). Flavin, Safadi and Reynolds are silent on the date field includes data information encoded with a Society of Motion Picture and Television Engineer's (SMPTE) date encoding and wherein the time field includes time information encoded with a Society of Motion Picture and Television Engineer's (SMPTE) time encoding. However, it is notoriously well known in the art of media or video distribution to include time and date fields with data information encoded with SMPTE date and time encoding for the advantage of having time and date codes that conform to SMPTE standards, which are well known and used in the video industry and may be useful for identifying video frames and timing information, especially, for video editing purposes. The SmpteDate and SmpteTime provide further evidence that these standards are well known and used among those of ordinary skill in the art. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have included a date field that includes data information encoded with a Society of Motion Picture and Television Engineer's (SMPTE) date encoding and wherein the time field includes time information encoded with a Society of Motion Picture and Television Engineer's (SMPTE) time encoding for the advantages given above.

10. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flavin in view of Safadi and Reynolds, as applied to claim 17, in further view of Sequeira (US 2001/0000194).

Regarding Claim 19, Flavin, Safadi and Reynolds disclose all the limitations of Claim 17. Flavin and Reynolds are silent on intermediary stream processing application for receiving the media stream that includes the private cue packet, processing the media stream, and re-transmitting the media stream to one of other intermediary stream processing applications and a client-side cue handling mechanism. In analogous art, Sequeira discloses intermediary stream processing application for receiving the media stream that includes the private cue packet, processing the media stream, and re-transmitting the media stream to one of other intermediary stream processing applications and a client-side cue handling mechanism or each task and media may be distributed to a relevant slave task scheduler for execution at a proper time, wherein a slave task scheduler/server may track the tasks given to it and prepare media devices to send the scheduled information at the appropriate time (Pages 1-3, paragraphs 0013-0015, 0031-0048, Figures 1 and 2) and records including fields transmitted to other devices, such as a set-top boxes (STBs), downstream of the data servers, so that the devices may recognize and extract the data form the data stream and process the data accordingly (Page 12, paragraphs 0099-0100, Pages 11-12, paragraphs 0082-0097 and Figs. 12-13, 18-22, and 25-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination the additional teachings of Sequeira for the advantages of providing additional intermediate

stream processing applications in order to have backup systems incase parts of the broadcast network breakdown, as well as, to provide for additional schedulers/servers to make updates or modifications to media streams and events within the broadcast streams (Page 3, paragraph 0042).

Regarding Claim 20, Flavin, Safadi, Reynolds and Sequeira disclose all the limitations of Claim 19. Reynolds discloses private cue packets (Pages 3-4, paragraph 0032-0040).

Regarding Claim 21, Flavin, Safadi, Reynolds and Sequeira disclose all the limitations of Claim 19. Reynolds discloses the "private" cue packets and adding content by substitution (Pages 3-4, paragraph 0032-0040). Sequeira discloses re-transmitting the media stream to one of other intermediary stream processing application and receivers including updating or editing, adding, deleting, (Pages 1-3, paragraphs 0013-0015, 0031-0048).

Regarding Claim 22, Flavin, Safadi, Reynolds and Sequeira disclose all the limitations of Claim 19. Reynolds discloses the "private" cue packets including removing a private cue packet by overwriting (Pages 3-4, paragraph 0032-0040). Sequeira discloses re-transmitting the media stream to one of other intermediary stream processing application and receivers including removing or updating or editing, adding, deleting, (Pages 1-3, paragraphs 0013-0015, 0031-0048).

11. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flavin in view of Safadi and Reynolds, as applied to claim 1, in further view of applicant's admission of fact.

Regarding Claim 25, Flavin and Reynolds disclose all the limitations of Claim 1. Flavin and Reynolds do not explicitly disclose the claimed "wherein the private cue is generated as a Real-Time Transport Protocol (RTP) payload. Applicant's admission of fact provides evidence to include it use the Internet as a network for distribution or broadcasting to use RTP for the advantage of delivering real-time data, including audio and video media more efficiently by using a well known Internet-standard protocol. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have used RTP for the advantage given above.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FARZANA E. HOSSAIN whose telephone number is (571)272-5943. The examiner can normally be reached on Monday to Friday 7:30 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/
Supervisory Patent Examiner, Art Unit 2623

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